

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

file



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,639	04/03/2001	John A. Aiken JR.	RSW920000152US1	1361

7590 08/16/2004

Jerry W. Herndon
IBM Corporation
T81/503
PO Box 12195
Research Triangle Park, NC 27709

EXAMINER

PEREZ DAPLE, AARON C

ART UNIT	PAPER NUMBER
----------	--------------

2154

DATE MAILED: 08/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/824,639

Applicant(s)

AIKEN, JOHN A.

Examiner

Aaron C Perez-Daple

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Action is in response to Application filed 4/3/01, which has been fully considered.
2. Claims 1-24 are presented for examination.
3. This Action is non-Final.

Claim Objections

4. **Claims 15 and 23** are objected to because of the following informalities: Line 8 of claim 15 and line 11 of claim 23 recite, "electing" where it appears that they should recite -- selecting --. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 7, 8, 15, 16, 23 and 24** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, claims 7, 15 and 23 recite "responsive to receiving a selective activation message from each of one or more server applications." Because some server applications may not have information for automatic affinities, it appears that this limitation should more properly recite -- responsive to receiving a selective activation message from each of one or more server applications *having the one or more affinities* --. Claims 7, 15 and 23 further recite "using workload balancing otherwise." It is not clear to what specific method steps "otherwise" refers. Moreover, it appears that this

limitation should be listed as a separate method step. The Examiner interprets that workload balancing is used if a particular one of the server applications is not selected.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. **Claims 1-6, 9-14, and 17-22** are rejected under 35 U.S.C. 102(e) as being anticipated by Modi et al. (US 6,587,866 B1) (hereinafter Modi).

9. As for claims 1, 9 and 17, Modi discloses a method of automatically providing server affinities for related concurrent connection requests in networking environments which perform workload balancing, comprising steps of:

selectively activating an affinity for a particular server application (col. 9, line 66 – col. 10, line 46, “Fig. 6 is a...better load balancing.”; col. 15, line 29 – col. 16, line 13, “Therefore, the second...pages and connections.”);

routing a first connection request to the particular server application from a selected source (col. 9, line 66 – col. 10, line 46, “Fig. 6 is a...better load balancing.”; col. 15, line 29 – col. 16, line 13, “Therefore, the second...pages and connections.”); and

bypassing normal workload balancing operations, responsive to the selective activation, for subsequent concurrent connection requests for the particular server application from the

Art Unit: 2154

selected source while at least one such concurrent connection request remains active (col. 9, line 66 – col. 10, line 46, “Fig. 6 is a...better load balancing.”; col. 15, line 29 – col. 16, line 13, “Therefore, the second...pages and connections.”).

10. As for claims 2, 10 and 18, Modi discloses the method according to claims 1, 9 and 17 wherein the selected source is a selected client (clients 121-123, Fig. 1).
11. As for claims 3, 11 and 19, Modi discloses the method according to claims 2, 10 and 18 wherein the selected client is identified by its Internet Protocol ("IP") address (col. 10, line 26 – col. 11, line 3, “If the service...and service port.”).
12. As for claims 4, 12 and 20, Modi discloses the method according to claims 2, 10 and 18, wherein the selected client is identified by its Internet Protocol ("IP") address and port number (col. 10, line 26 – col. 11, line 3, “If the service...and service port.”).
13. As for claims 5, 13 and 21, Modi discloses the method according to claims 1, 9 and 17, wherein the step of selectively activating further comprises the step of detecting an automatic affinity activation parameter on a configuration statement for the particular server application (col. 9, line 66 – col. 10, line 46, “Fig. 6 is a...better load balancing.”; col. 15, line 29 – col. 16, line 13, “Therefore, the second...pages and connections.”).
14. As for claims 6, 14 and 22, Modi discloses the method according to claims 1, 9 and 17, wherein the bypassing step causes the subsequent connection request messages from the selected source to be routed to an instance of the particular server application which is processing the first connection request (col. 9, line 66 – col. 10, line 46, “Fig. 6 is a...better load balancing.”; col. 15, line 29 – col. 16, line 13, “Therefore, the second...pages and connections.”).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims, 7, 8, 15, 16, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Modi in view of Abramson et al. (US 6,539,434 B1) (hereinafter Abramson).

17. As for claims 7, 15 and 23, Modi discloses a method of automatically routing related concurrent connection requests in a networking environment which performs workload balancing, comprising steps of:

storing information for one or more automatic affinities (col. 10, line 26 – col. 11, line 3,

“If the service...and service port.”);

receiving incoming connection requests from client applications (col. 4, lines 60-63,

“Clients 121-123...computing system 100.”); and

routing each received connection request to a particular one of the server applications, further comprising steps of:

selecting the particular one of the server applications using the stored information for automatic affinities, when the client application sending the received connection request is identified in the stored information as having an existing connection to the particular one and wherein one of the selective activation messages has been received from the particular one

Art Unit: 2154

(col. 9, line 66 – col. 10, line 46, “Fig. 6 is a...better load balancing.”; col. 15, line 29 – col. 16, line 13, “Therefore, the second...pages and connections.”); and

selecting the particular one of the server applications using workload balancing otherwise (Fig. 6; col. 10, line 26 – col. 11, line 3, “If the service...and service port.”).

Although arguably inherent to Modi, Modi does not specifically disclose storing information for the automatic affinities responsive to receiving a selective activation message from each of one or more server applications. Abramson teaches storing information for the automatic affinities (sessions) responsive to receiving a selective activation message from each of one or more server applications (col. 3, lines 41-65, “When an HTTP...other application servers.”). It would have been obvious to one of ordinary skill in the art to modify Modi by storing information for the automatic affinities (sessions) responsive to receiving a selective activation message from each of one or more server applications in order to regulate (e.g. start and stop) affinities, as taught by Abramson above.

18. As for claims 8, 16 and 24, Modi discloses the method according to claims 7, 15 and 23, wherein the client application is identified as having one of the existing connections with the particular one if a destination address and destination port, as well as a source address and optionally a source port number, of the connection request being routed match the stored information (col. 3, lines 19-38, “One embodiment of...of client affinity.”; col. 8, lines 6-15, “PDT 304 is...computing system 100.”).

19. Claims, 7, 8, 15, 16, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Modi in view of Devarakonda et al. (US 6,424,992 B1) (hereinafter Devarakonda).

Art Unit: 2154

20. As for claims 7, 15 and 23, Modi discloses a method of automatically routing related concurrent connection requests in a networking environment which performs workload balancing, comprising steps of:

storing information for one or more automatic affinities (col. 10, line 26 – col. 11, line 3,

“If the service...and service port.”);

receiving incoming connection requests from client applications (col. 4, lines 60-63,

“Clients 121-123...computing system 100.”); and

routing each received connection request to a particular one of the server applications, further comprising steps of:

selecting the particular one of the server applications using the stored information for automatic affinities, when the client application sending the received connection request is identified in the stored information as having an existing connection to the particular one and wherein one of the selective activation messages has been received from the particular one (col. 9, line 66 – col. 10, line 46, “Fig. 6 is a...better load balancing.”; col. 15, line 29 – col. 16, line 13, “Therefore, the second...pages and connections.”); and

selecting the particular one of the server applications using workload balancing otherwise (Fig. 6; col. 10, line 26 – col. 11, line 3, “If the service...and service port.”).

Although arguably inherent to Modi, Modi does not specifically disclose storing information for the automatic affinities responsive to receiving a selective activation message from each of one or more server applications. Devarakonda teaches storing information for the automatic affinities responsive to receiving a selective activation message from each of one or more server applications in order to regulate affinities (col. 6, lines 5-12, “According

Art Unit: 2154

to yet...is turned off"). It would have been obvious to one of ordinary skill in the art to modify Modi by storing information for the automatic affinities responsive to receiving a selective activation message from each of one or more server applications in order to regulate affinities, as taught by Devarakonda above.

21. As for claims 8, 16 and 24, Modi discloses the method according to claims 7, 15 and 23, wherein the client application is identified as having one of the existing connections with the particular one if a destination address and destination port, as well as a source address and optionally a source port number, of the connection request being routed match the stored information (col. 3, lines 19-38, "One embodiment of...of client affinity."; col. 8, lines 6-15, "PDT 304 is...computing system 100.").

Double Patenting


22. **Claims 1-24** are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-37 of copending Application No. 09/825071. Although the conflicting claims are not identical, they are not patentably distinct from each other because all of the limitations of claims 1-24 have equivalent limitations in claims 1-37 of 09/825071.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Application/Control Number: 09/824,639

Page 10

Art Unit: 2154

 7/30/04

Aaron Perez-Daple



JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100